

IL13 Rabbit pAb

Catalog # AP97185

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P20109
Other Accession	P20109
Reactivity	Human
Predicted	Rat, Pig, Mouse, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14108
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse IL-13
Epitope Specificity	45-56/131(mo)
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the IL-4/IL-13 family.
DISEASE	Defects in IL13 may be a cause of susceptibility to allergic rhinitis (ALRH) [MIM:607154]. Allergic rhinitis is a common disease of complex inheritance and is characterized by mucosal inflammation caused by allergen exposure.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes an immunoregulatory cytokine produced primarily by activated Th2 cells. This cytokine is involved in several stages of B-cell maturation and differentiation. It up-regulates CD23 and MHC class II expression, and promotes IgE isotype switching of B cells. This cytokine down-regulates macrophage activity, thereby inhibits the production of pro-inflammatory cytokines and chemokines. This cytokine is found to be critical to the pathogenesis of allergen-induced asthma but operates through mechanisms independent of IgE and eosinophils. This gene, IL3, IL5, IL4, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL4. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	16163
Other Names	IL-13; P600; IL13_HUMAN; IL13; NC30; IL13_MOUSE; T-cell activation protein P600; IL13_RAT; interleukin 13; allergic rhinitis; Bronchial hyperresponsiveness-1 (bronchial asthma)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name IL13

Synonyms IL-13

Function Cytokine that plays important roles in allergic inflammation and immune response to parasite infection (PubMed:[15361238](#)). Synergizes with IL2 in regulating interferon-gamma synthesis. Stimulates B-cell proliferation, and activation of eosinophils, basophils, and mast cells (By similarity). Plays an important role in controlling IL33 activity by modulating the production of transmembrane and soluble forms of interleukin-1 receptor-like 1/IL1RL1 (PubMed:[34789557](#)). Displays the capacity to antagonize Th1-driven proinflammatory immune response and down-regulates synthesis of many proinflammatory cytokines including IL1, IL6, IL10, IL12 and TNF through a mechanism that partially involves suppression of NF-kappa-B (By similarity). Also functions on nonhematopoietic cells, including endothelial cells where it induces vascular cell adhesion protein 1/VCAM1, which is important in the recruitment of eosinophils. Exerts its biological effects through its receptors which comprises the IL4R chain and the IL13RA1 chain, to activate JAK1 and TYK2, leading to the activation of STAT6 (PubMed:[34795444](#), PubMed:[8871614](#)). Aside from IL13RA1, another receptor IL13RA2 acts as a high affinity decoy for IL13 and mediates internalization and depletion of extracellular IL13 (PubMed:[29305434](#)). Induces inflammatory response in esophageal epithelium which results in a dysregulation of desmosome intercellular adhesion junctions, via down-regulation of DSG1 (PubMed:[24220297](#)).

Cellular Location Secreted.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.